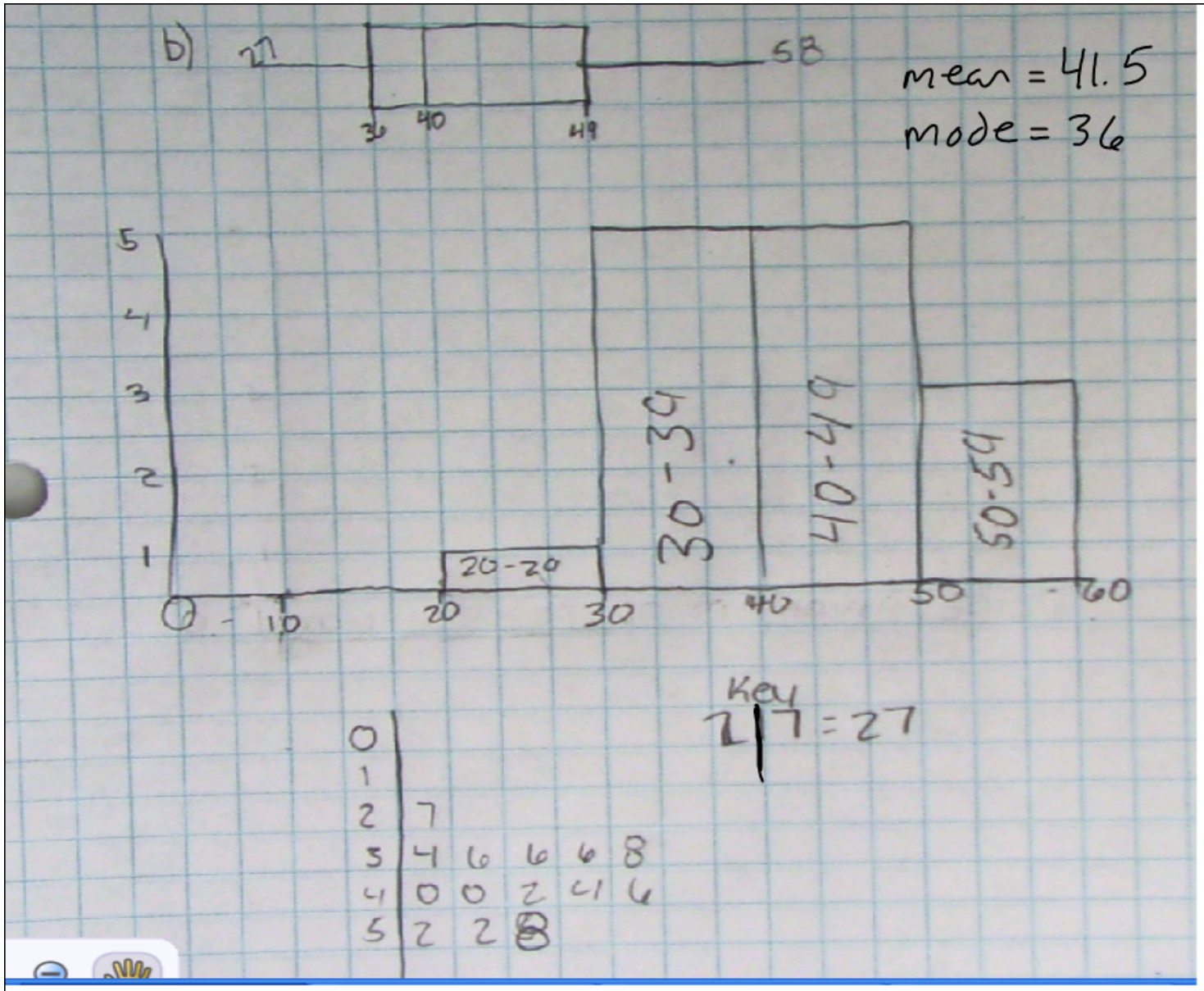
① This data set gives the number of hours of use before each of 14 batteries required recharging.

27, 34, 36, 36, 36, 38, 40, 40, 42, 44, 46, 52, 52, 58

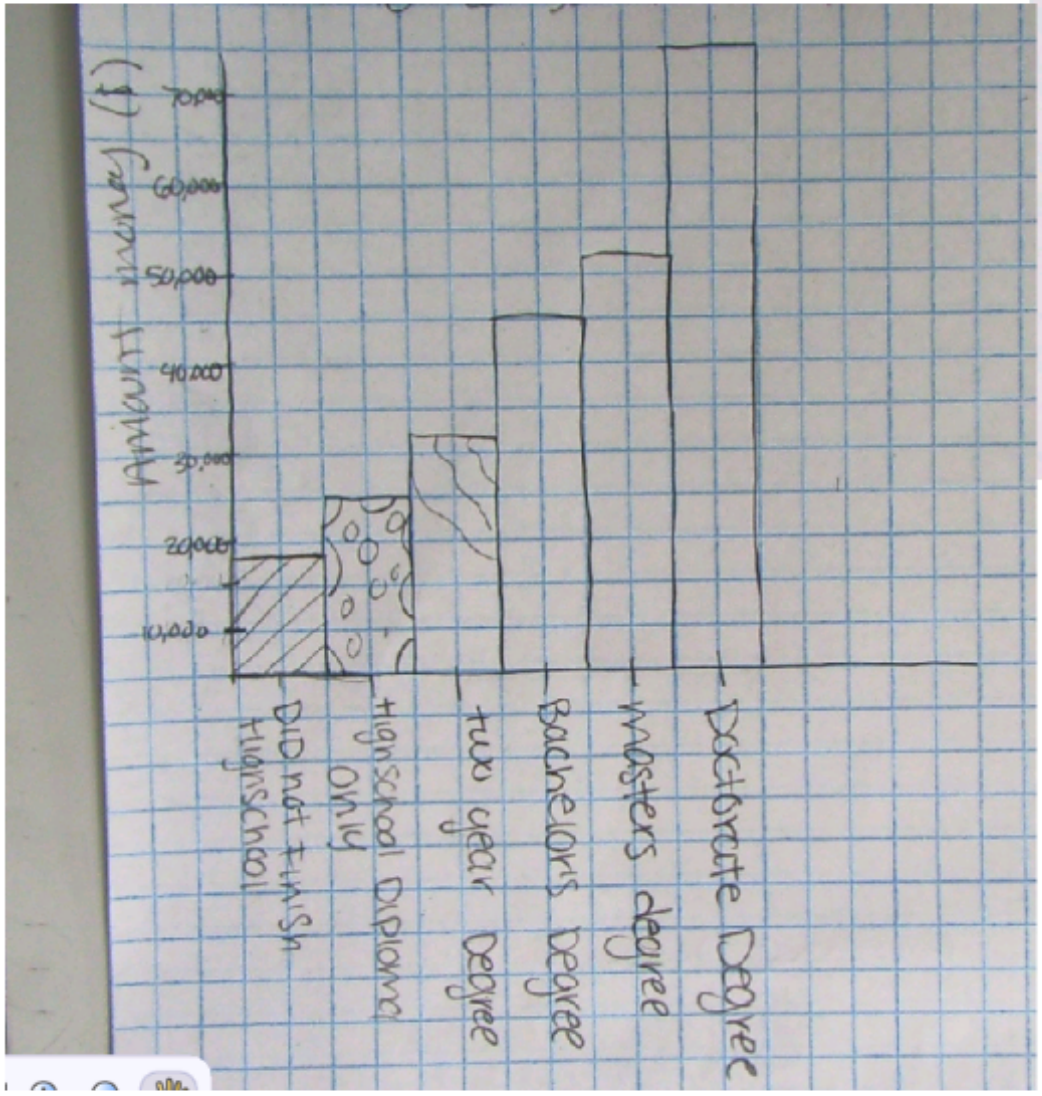
(a) Find the mean, median, and mode.

(b) Make a box plot, histogram, and stem-plot for the data

b)


27
58
36
40
49
mean = 41.5
mode = 36
5
4
3
2
1
0
10
20
30
40
50
60
20-20
30-30
40-40
50-51
Key
2 | 7 = 27
0
1
2 | 7
3 | 4 6 6 6 8
4 | 0 0 2 4 6
5 | 2 2 8

Make a bar graph of the data



Mean Annual Wages, 1998

Level of education	Amount ($)
Did not finish high school	18,913
High school diploma only	25,257
Two-year degree (AA/AS)	33,765
Bachelor's degree (BA/BS)	45,390
Master's degree (MA/MS)	52,951
Doctorate degree	75,071

(*U.S. Census 2000*)

Equation Basics

① Solve for x

ⓐ $3x - 12 = 42$

$+12 \quad +12$

$\frac{3x}{3} = \frac{54}{3}$

$x = 18$

ⓑ $7 - 4x = 10$

$-7 \quad -7$

$\frac{-4x}{-4} = \frac{3}{-4}$

$x = -0.75$

ⓒ $\frac{x+2}{5} = 6$

$x \quad 6$

$+2 \quad \cdot 5 = 30$

$\div 5 \quad -2 = 28$

$= 6$

ⓓ $\frac{6 - 3(x-4)}{7} = 3$

$X \quad 3$

$-4 \quad \cdot 7 = 21$

$\cdot -3 \quad -6 = 15$

$+6 \quad \div -3 = -5$

$\div 7 \quad +4 = -1$

$= 3$

write equations for the tables

(a)

x	y
0	3
1	6
2	9

$y = 3x + 3$ (+3, +3)

x=0, start (y-int) = 3

rate (how much up/down) = 3

(b)

x	y
0	11
1	7
2	3
3	-1

(-4, -4, -4)

y-int = 11

rate = -4

$y = -4x + 11$

(c)

x	y
-2	1
0	5
1	3
3	11

(+2, +2, +2)

$\frac{6}{3} = 2$

y-int = 5

rate = 2

$y = 2x + 5$

(d)

x	y
-4	5
12	-3
2	2

x	y
-4	5
2	2
12	-3

10, -5

$\frac{-5}{10} = \frac{y}{x} = -\frac{1}{2} = \text{rate}$

y-int = 3

$y = -\frac{1}{2}x + 3$

Suppose a new small-business computer system costs $5,400. Every year its value drops by $525.

$y = -525x + 5,400$

(a) Define variables and write an equation to give value for any given yr.

(b) What is the rate of change? What is its real-world meaning?

-525 every yr. down

(c) What is the y-intercept and what is its real-world meaning?

5400 $ it cost

(d) What is the x-intercept and what is its real-world meaning?

how long until value is zero

$y = 525x + 5400$

$0 = -525x + 5400$

10.28 yrs.

HW p. 246 #8, 12-15 & study

Turn in

- classwork - labeled
- HW from yesterday
- 6